REMARKS

The Office Action mailed November 20, 2006 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-20 are now pending in this application. Claims 1-20 stand rejected. Claims 10-11 and 18 stand objected to. Claims 1, 10, 11, 13, and 18-20 have been amended. No new matter is added.

Claim 20 has been amended to correct minor informalities.

The objection to Claims 10, 11, and 18 due to informalities is respectfully traversed. Claims 10, 11, and 18 have been amended to recite that a segmented endocardial volume of a left ventrical at an end systole and/or an end diastole phase is generated and measured, respectively. For at least the reasons set forth above, Applicants request that the objection to Claims 10, 11, and 18 be withdrawn.

The rejection of Claims 1-20 under 35 U.S.C. § 102(b) as being anticipated by Drummond et al. (U.S. Patent 6,628,743) ("Drummond") is respectfully traversed.

Drummond describes a method and system for acquiring and analyzing cardiac data from a patient. An CT imaging system (100) includes a scanner (110) that scans a patient to acquire a volume of cardiac data for a region of interest of a heart (column 4, lines 61-67, and column 5, line 28 - column 6, line 35). A post-processing algorithm automatically delineates contrast between a left ventrical and myocardial muscle to render a volume of the left vertical, display reconstructed images of a heart at the end systole and the end diastole, and calculate cardiac functional parameters (column 9, line 31-column 10, line 39). Post-processing the cardiac data also includes visualizing short axis or long axis images. Notably, the CT system (100) does not calculating an axis of inertia of a segmented left cavity volume, and automatically generate a long or a short axis orientation image of the heart based on a calculated axis of inertia.

Claim 1 recites a method for generating views of a heart. The method including "receiving a multi-phase axial cardiac dataset; receiving a selection of a heart phase from a user; segmenting a left cavity volume image of the heart from the multi-phase axial cardiac dataset; calculating an axis of inertia of the segmented left cavity volume; automatically generating, based on the calculated axis of inertia, at least one of a long axis orientation image and a short axis orientation image of the heart; when the received selection is systole, generating an endocardial volume of a left ventricle at an end systole phase without further user intervention; and when the received selection is diastole, generating an endocardial volume of the left ventricle at an end diastole phase without further user intervention."

Drummond does not describe nor suggest a method for generating views of a heart as recited in Claim 1. More specifically, Drummond does not describe nor suggest a method including segmenting a left cavity volume image of a heart from a multi-phase axial cardiac dataset; calculating an axis of inertia of the segmented left cavity volume; automatically generating, based on the calculated axis of inertia, at least one of a long axis orientation image and a short axis orientation image of the heart. Rather, in contrast to the present invention, Drummond describes an automated cardiac analysis process. Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over Drummond.

Claims 2-12 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-12 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-12 likewise are patentable over Drummond.

Claim 13 recites a medical imaging apparatus for generating views of a heart along anatomically useful planes. The medical imaging apparatus including an imaging system that includes "a detector array; at least one radiation source; and a computer coupled to said detector array source; and a workstation coupled to said computer, said workstation configured to: receive a multi-phase axial cardiac dataset from said computer; receive a selection of a heart phase from a user; segment a left cavity volume image of the heart from said multi-phase axial cardiac dataset; calculate an axis of inertia of said segmented left cavity volume; automatically generate, based on said calculated axis of inertia, at least one of a long axis orientation image and a short axis orientation image of the heart; when the

received selection is systole, generate an endocardial volume of a left ventricle at an end systole phase without further user intervention; and when the received selection is diastole, generate an endocardial volume of the left ventricle at an end diastole phase without further user intervention."

Drummond does not describe nor suggest a medical imaging apparatus for generating views of a heart as recited in Claim 1. More specifically, Drummond does not describe nor suggest a medical imaging apparatus including and imaging system that includes a workstation configured to segment a left cavity volume image of a heart from a multi-phase axial cardiac dataset, calculate an axis of inertia of said segmented left cavity volume, and automatically generate, based on said calculated axis of inertia, at least one of a long axis orientation and a short axis orientation image of the heart. Rather, in contrast to the present invention, Drummond describes an automated cardiac analysis process. Accordingly, for at least the reasons set forth above, Claim 13 is submitted to be patentable over Drummond.

Claims 14-18 depend directly from independent Claim 13. When the recitations of Claims 14-18 are considered in combination with the recitations of Claim 13, Applicants submit that dependent Claims 14-18 likewise are patentable over Drummond.

Claim 19 recites a computer readable medium encoded with a program executable by a computer for generating views of a heart along anatomically useful planes. The program is "configured to instruct the computer to: receive a multi-phase axial cardiac dataset of the heart; receive a selection of a phase; segment a left cavity volume image of the heart from said multi-phase axial cardiac dataset; calculate an axis of inertia of said segmented left cavity volume; automatically generate, based on said calculated axis of inertia, at least one of a long axis orientation and a short axis orientation image of the heart; when the received selection is systole, generate an endocardial volume of a left ventricle at an end systole phase without further input; and when the received selection is diastole, generate an endocardial volume of the left ventricle at an end diastole phase without further input."

Drummond does not describe nor suggest a computer readable medium encoded with a program as recited in Claim 19. More specifically, Drummond does not describe nor

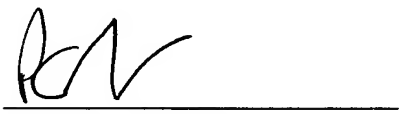
suggest a program configured to segment a left cavity volume image of a heart from a multi-phase axial cardiac dataset, calculate an axis of inertia of said segmented left cavity volume, and automatically generate, based on said calculated axis of inertia, at least one of a long axis orientation and a short axis orientation image of the heart. Rather, in contrast to the present invention, Drummond describes an automated cardiac analysis process. Accordingly, for at least the reasons set forth above, Claim 19 is submitted to be patentable over Drummond.

Claim 20 depend directly from independent Claim 19. When the recitations of Claim 20 are considered in combination with the recitations of Claim 19, Applicants submit that dependent Claim 20 likewise is patentable over Drummond.

For the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1-20 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully submitted,



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